## PROGRAMME TUESDAY 15 OCTOBER 2024

## **OVERVIEW**

9.00 - 09.15

Welcome note BEL Flottilia Admiral Baudouin Coppieters de Gibson (DG RHID)

9.15 - 9.30

Welcome note US Col Seaberry (tbc)/US Embassy in Brussels

9.30 - 9.50

BE RHID Program Overview Karen Pieters, Adjunctdirector departement STRD

9.50 - 10.10

US ONRG/DEVCOM Program Overview Scott Walper (ONRG) & Jonathon Brame (US Army DEVCOM)

10.10 - 10.30

Start-up Accelerators: Catalysts for Defense **Technology** Evolution Julien Toussaint (WSL)

10.30 - 10.50

Testimonial from a **US-funded** research project: Evaluation of additively manufactured ceramic composites for heat shield and control surface applications Bernd Helber (VKI)

LIGHTNING **PRESENTATIONS** 

SESSION 1 -AI/AUTONOMY 11.30 - 12.30

- ► Michael Ilsbroux (Epic Blue NV) Al-driven Tactical Decision Aids
- ► Emma Claeys (DotOcean) Towards Decentralized Information Superiority
- ► Adnan Shahid (IMEC/UGent) Wireless Foundation Models for Defense **Applications**
- ▶ Jasper Wouters (Magics Technologies NV) Radiation-hard AI processor to address security challenges in space
- ► Mario Maliza (Royal Military Academy) AI-Driven Autonomous Systems for Hazardous Terrain Operations
- ► Tjorven Delabie (Arcsec) An autonomous approach to detecting, characterizing an assessing threats to space-based assets.

12.30 - 14.00

Lunch break/ **Networking session** 

SESSION 2 -AI/AUTONOMY & BIOTECHNOLOGY

14.00 - 15.00

► Dirk Van Rooy (UAntwerpen)

between land, sea, and air operations using advanced humanmachine teaming and large-scale simulated war games

- ▶ Nick Destrycker (EDGX) Reprogrammable Reconnaissance Swarm
- ► Maarten Slembrouck (UGent) Countering Advanced Drones: Military Training for the Next Generation
- ► Jean-Paul Pirnay (Queen Astrid Military Hospital) Towards an alternative approach for personalized phage therapy: instant and on-site production of synphages
- ▶ Luis Diaz Allegue (UAntwerpen) BioN-Fix: Nitrogen fixation using purple phototrophic bacteria
- ► Daniel Berckmans (BioRICS NV) Military decisions based on real-time monitored readiness-to-perform

15.00 - 15.20

Coffee break/ Networking session

SESSION 3 -MATERIAL SCIENCES, **HYPERSONICS** & QUANTUM

15.20 - 16.30

- ► Louis Dechambre

(Aerospace Lab) Development of highthrough-put, thin-film, flexible III-V solar cell blanket

- ► Branko Kolaric (UMons) Advancing Eco-Friendly Photonic Nanostructures
- ► Alan Viladegut (VKI) Overview of new concepts for Thermal Protection System technologies
- ▶ Prof. Edmond Joncheere (University of Southern California/ Unamur) Trustworthiness in robust hypersonic trajectory planning
- ► Bayindir H. Saracoglu Unstart models for high speed inlets for next generation supersonic and hypersonic propulsion
- ► Guido Torrese (Thales Belgium) **Quantum Antennas**
- ► Raphaël Marion (Royal Observatory of Belgium) The Belgian Time and Frequency optical network - A support infrastructure for new techniques and applications

16.30 - 17.00

Closing remarks

17.30

**Networking** 







